

What is claimed is:

1. A semiconductor laser device having an index-guided structure and oscillating in a fundamental mode, comprising:

5 a lower cladding layer;
 a lower optical waveguide layer formed above said lower cladding layer;
 a quantum well layer formed above said lower optical waveguide layer;
10 an upper optical waveguide layer formed above said quantum well layer; and
 a current confinement structure formed above said upper optical waveguide layer;
 said upper optical waveguide layer has a first thickness smaller than a second thickness of said lower optical waveguide layer.

2. A semiconductor laser device according to claim 1, wherein a sum of said first and second thicknesses is 0.5 micrometers or greater.

20 3. A semiconductor laser device according to claim 1, wherein a bottom of said current confinement structure is at a height smaller than 0.25 micrometers above an upper surface of said quantum well layer.

25 4. A semiconductor laser device according to claim 3, wherein said bottom of said current confinement structure is arranged on said upper surface of said upper optical

waveguide layer.

5. A semiconductor laser device according to claim 1,
wherein said lower optical waveguide layer, said quantum
well layer, and said upper optical waveguide layer are
5 made of an aluminum-free semiconductor material.

112 6. A semiconductor laser device according to claim 5,
wherein at least one of said lower cladding layer and said
upper cladding layer is made of a semiconductor material
containing aluminum.

7. A semiconductor laser device according to claim 1,
wherein said index-guided structure is an internal stripe
type or a ridge waveguide type.

8. A semiconductor laser device according to claim 1,
wherein said index-guided structure has a stripe width of
4 micrometers or smaller.

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